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EXAMINER
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Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	09/852,301	KINJO, NAOTO
	Examiner	Art Unit	
	James A. Thompson	2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *15 June 2006*.

2a)☒ This action is **FINAL.** 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle,* 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☐ Claim(s) _____ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *2-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *10 September 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☒ All b)☐ Some * c)☐ None of:

      1.☒ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

Response to Arguments

1.   Applicant's arguments filed 15 June 2006 have been fully
considered but they are not persuasive.

   Regarding page 8, line 2 to page 10, line 10: Applicant in
this section discusses general aspects of the present specifica-
tion and Applicant's impression of Michel (US Patent 6,215,562
B1) and Bernardi (US Patent 6,021,278). Examiner has fully con-
sidered Applicant's remarks. Examiner also respectfully reminds
Applicant that, although the claims are interpreted in light of
the specification, limitations from the specification are not
read into the claims [see *In re Van Geuns*, 988 F.2d 1181, 26
USPQ2d 1057 (Fed. Cir. 1993)]; and that, during patent examinat-
ion, the pending claims must be given their broadest reasonable
interpretation consistent with the specification [MPEP §2111].

   Regarding page 10, lines 11-20: The calibration of the
printer in Michel inherently affects the condition of the image
to be printed on said printer. Thus, the user input (which
takes the form of a verbal expression *as per* the teachings of
Bernardi) which is used for calibration is based on the conditi-
on of an image, said image being printed on a page. Secondly,
even if one were to assume for the sake of argument that Michel
teaches that only a printer, and not an image, is calibrated,
Bernardi teaches that voice recognition commands are used to
perform image processing operations on an image, and affect the
condition of an image (see, e.g., column 2, lines 21-34 of
Bernardi). Thus, the combination still teaches that a previous-
ly set verbal expression represents a condition of an image or a
direction of correction of the image, as recited in claim 2.

Regarding page 11, line 1 to page 12, line 2: The "degree of improperness" can be reasonably interpreted as the degree to which the reproduction colors are miscalibrated, and thus do not print the proper colors for the inputs given. If the ink densities of the printer are such that the printed result of an image is different from the image data input to the printer, then there is clearly a degree of improperness that is then corrected. While it is true that Michel does not use the same specific four transfer curves shown in Applicant's specification, said transfer curves are not recited in claim 2. Again, although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims [see *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993)].

Regarding page 12, lines 3-11: Examiner has clearly relied upon more than figure 1 of Michel in demonstrating that Michel teaches the limitation "a plurality of image correction conditions of different intensities are set with respect to the user input", as recited in claim 2. Examiner relies upon figure 1; column 5, lines 53-60; and column 7, lines 1-3 of Michel to demonstrate that Michel teaches said limitation. Column 5, lines 53-60 of Michel show that a user can select among a wide range of values for color calibration (and thus set a plurality of image correction conditions of different intensities). Column 7, lines 1-3 of Michel demonstrates the user input of a particular row and column on a control panel in order to select a specific match as part of the calibration.

Regarding page 12, lines 12-14: Bernardi is relied upon for the teachings with respect to verbal expressions, as set forth in the previous office action (mailed 17 March 2006). It

has been demonstrated above that the alleged deficiencies of
Michel are not, in fact, deficiencies at all.

   Regarding page 12, lines 15-17: Since claim 2 has been
demonstrated to be taught by the prior art, claims 3, 6 and 9
cannot therefore be considered patentable for similar reasons.

   Regarding page 12, line 18 to page 13, line 7: "Totalizat-
ion" is rather broad terminology. The calibration taught by
Michel is an iterative process. Thus, the result of such an
iterative process can be reasonably considered to be a totaliza-
tion since the result of the calibration is the result of the
totality of the iterative process (column 7, lines 3-14 of Mich-
el). Applicant is again reminded that, during patent examinati-
on, the pending claims must be given their broadest reasonable
interpretation consistent with the specification [MPEP §2111].

   Regarding page 13, line 8 to page 14, line 4: Firstly,
Applicant has not addressed the actual teaching from Wong (US
Patent 6,557,102 B1) presented in said previous office action,
but merely relies upon generalizations of the overall reference.
Examiner has not, as Applicant has alleged, stated that Wong and
the present invention have common purposes of authentication,
and therefore Examiner respectfully request that Applicant point
out by page and line number where in said previous office action
Applicant believes Examiner made such a statement. Examiner has
clearly stated that Wong is analogous art since Wong is concern-
ed with digital image data processing [see page 6, lines 20-22
of said previous office action]. The ability to authenticate
images mentioned on page 6, lines 25-28 of said previous office
action relates to the motivation that one of ordinary skill in
the art at the time of the invention would have had to combine
the references, since it is clearly a desirable result for one

to know if an image to be printed (or already printed) is authentic.

Secondly, Wong is relied upon to teach sorting images by using image characteristic values of the images. The totalization already taught by Michel would then be performed on said sorted images, as clearly set forth in said previous office action. "Characteristic values" is also a rather broad term, which is clearly met by the teachings of Wong.

Finally, claim 3 does not recite sorting by overexposure scenes, underexposure scenes, ordinary scenes, portraits, scenery, night view. Also, Wong is not relied upon to teach said sorting recited in claim 11.

Regarding page 14, lines 5-16: Firstly, Michel prioritizes computational operations via the user selection of the particular calibrations to be performed, rather than simply performing each and every possible type of calibration. Bernardi prioritizes computation operations by prioritizing the voice commands of the user.

Secondly, Examiner assumes that "Fig. 1 and col. 5, lines 53-60 and col. 7, lines 1-3" mentioned by Applicant are in reference to the Michel patent, since such portions were not cited by Examiner with respect to Hisatake (USPN 5,669,040). The limitation "plurality of image correction conditions" has already been addressed above and Michel has been clearly shown to teach said limitation.

Regarding page 14, lines 17-20: As set forth in said previous office action, it is the *combination* of Higurashi (US Patent 6,011,896) with Michel and Bernardi that teaches totalization for a predetermined number of frames [see page 13, line 25 to page 14, line 13 of said previous office action].

Regarding page 15, line 1: The newly added claims have been fully considered and are fully addressed below.

Regarding page 15, lines 2-8: All prior rejections have been maintained and the newly added claims have also been rejected. Since any new grounds of rejection have been necessitated by the newly added claims, the present action is made final.

Note: In said previous office action, official notice was taken in the rejection of claim 9 that switching between two modes of input is old, well-known and expected in the art. Since this has not been timely disputed by Applicant, Applicant is now deemed to accept that switching between two modes of input is old, well-known and expected in the art.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. **Claims 2-3, 7, 16-17 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Michel (US Patent 6,215,562 B1) in view of Bernardi (US Patent 6,021,278).**

Regarding claim 2: Michel discloses previously setting at least one user input representing a condition of an image (column 5, lines 44-53 of Michel) or a direction of correction of the image (column 6, lines 1-8 of Michel), at least one level indicative input as to a degree of improperness of the image of a

degree of the correction to be executed to the image (column 6,
line 62 to column 7, line 3 of Michel) and at least one image
correction condition corresponding to the user input and the
level indicative input (column 7, lines 9-14 of Michel); inputt-
ing the user input and the level indicative input as a correcti-
on instruction according to the image (column 5, lines 44-45 and
lines 50-51; and column 7, lines 1-2 of Michel); and correcting
the image under the corresponding image correction condition
according to the input user input (column 6, lines 1-8 of
Michel) and the level indicative input (column 7, lines 1-8 of
Michel), wherein a plurality of image correction conditions of
different intensities are set with respect to the user input
(figure 1; column 5, lines 53-60; and column 7, lines 1-3 of
Michel) and one of the image correction conditions is selected
based on the level indicative input (column 7, lines 1-3 and
lines 9-14 of Michel).

Michel does not disclose expressly that said user input and
said level indicative input are verbal expressions.

Bernardi discloses inputting a user command as a verbal
expression (column 3, lines 21-25 of Bernardi).

Michel is analogous art since Michel is in the same field
of endeavor as the present application, namely the calibration
and correction of digital image data. Michel and Bernardi are
combinable because they are from similar problem solving areas,
namely inputting user commands into an image processing system.
At the time of the invention, it would have been obvious to a
person of ordinary skill in the art to input the user input and
level indicative input, taught by Michel, as voice recognized
verbal expressions, as taught by Bernardi, and thus previously
set, input, and correct according to said commands, as taught by

Michel. The motivation for doing so would have been to allow for remote operation of the device (column 1, lines 16-18 of Bernardi). Therefore, it would have been obvious to combine Bernardi with Michel to obtain the invention as specified in claim 2.

Regarding claim 3: Michel discloses previously setting at least one user input representing a condition of an image (column 5, lines 44-53 of Michel) or a direction of correction of the image (column 6, lines 1-8 of Michel), at least one level indicative input as to a degree of improperness of the image of a degree of the correction to be executed to the image (column 6, line 62 to column 7, line 3 of Michel) and at least one image correction condition corresponding to the user input and the level indicative input (column 7, lines 9-14 of Michel); inputting the user input and the level indicative input as a correction instruction according to the image (column 5, lines 44-45 and lines 50-51; and column 7, lines 1-2 of Michel); and correcting the image under the corresponding image correction condition according to the input user input (column 6, lines 1-8 of Michel) and the level indicative input (column 7, lines 1-8 of Michel), wherein a relationship between a set of the user input and the level indicative input first input with respect to the image and correction of the image finally made is totalized (column 7, lines 3-8 of Michel), and the image correction condition corresponding to the user input and the level indicative input is updated according to the result of totalization (column 7, lines 9-14 of Michel).

Michel does not disclose expressly that said user input and said level indicative input are verbal expressions.

Bernardi discloses inputting a user command as a verbal expression (column 3, lines 21-25 of Bernardi).

Michel is analogous art since Michel is in the same field of endeavor as the present application, namely the calibration and correction of digital image data. Michel and Bernardi are combinable because they are from similar problem solving areas, namely inputting user commands into an image processing system. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to input the user input and level indicative input, taught by Michel, as voice recognized verbal expressions, as taught by Bernardi, and thus previously set, input, and correct according to said commands, as taught by Michel. The motivation for doing so would have been to allow for remote operation of the device (column 1, lines 16-18 of Bernardi). Therefore, it would have been obvious to combine Bernardi with Michel to obtain the invention as specified in claim 3.

Regarding claim 7: Michel discloses that the condition setting algorithm of image processing is updated according to the result of the totalization (column 7, lines 3-8 of Michel).

Regarding claim 16: Michel discloses that a plurality of images corrected under the image correction conditions are reproduced according to the user input (input verbal expression according to Michel in view of Bernardi, as discussed above) (column 7, lines 11-14 and lines 57-65 of Michel).

Regarding claim 17: Michel does not disclose expressly that the inputting verbal expression and the correcting the image are performed with respect to a common image.

Bernardi discloses that the inputting of a verbal expressi-on and correcting the image are performed with respect to a common image (column 2, lines 21-34 of Bernardi).

Michel is analogous art since Michel is in the same field of endeavor as the present application, namely the calibration and correction of digital image data. Michel and Bernardi are combinable because they are from similar problem solving areas, namely inputting user commands into an image processing system. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to input the verbal express-ion for and perform correction for a common image, as taught by Bernardi. The suggestion for doing so would have been to corre-ct for the individual pictures rather than the device itself, since each individual picture has its own unique properties that affects the calibration requirements, such as brightness (column 2, lines 30-34 of Bernardi). Therefore, it would have been obvious to combine Bernardi with Michel to obtain the invention as specified in claim 17.

Regarding claim 20: Michel discloses that the totalization comprises a sum of a number of times that each level indicative expression is inputted as the correction instruction (column 6, line 61 to column 7, line 8 of Michel).

4. **Claims 4-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Michel (US Patent 6,215,562 B1) in view of Bernardi (US Patent 6,021,278) and Wong (US Patent 6,557,102 B1).**

Regarding claim 4: Michel in view of Bernardi discloses that a relationship between the verbal expression first input with respect to the image and the correction of the image

finally made is totalized, as discussed above in the arguments
regarding claim 3, upon which claim 4 is dependent.

Michel in view of Bernardi does not disclose expressly that
image scenes of the images are sorted by using image characteri-
stic values of the images and the totalization is performed for
each of the image scenes sorted.

Wong discloses sorting image scenes of images (column 5,
lines 29-32 of Wong) by using image characteristic values of the
image (column 5, lines 49-53 and lines 57-59 of Wong).

Michel in view of Bernardi is combinable with Wong because
they are from the same field of endeavor, namely digital image
data processing. At the time of the invention, it would have
been obvious to a person of ordinary skill in the art to sort
the images, as taught by Wong, and then perform the totalization
taught by Michel on said sorted images. The motivation for
doing so would have been to be able to determine the authentici-
ty of an image by being able to examine the data associated with
the image (column 2, lines 24-29 of Wong). Therefore, it would
have been obvious to combine Wong with Michel in view of
Bernardi to obtain the invention as specified in claim 4.

Regarding claim 5: Michel in view of Bernardi discloses
that a relationship between the verbal expression first input
with respect to the image and the correction of the image
finally made is totalized, and the image correction condition
corresponding to the verbal expression is updated according to
the result of totalization, as discussed above in the arguments
regarding claim 3, upon which claim 5 is dependent.

Michel in view of Bernardi does not disclose expressly
that, when the image is reproduced on a photographic print, the
image is sorted according to at least one of printing method,

type of printing paper, printer model, individual printer used,
operator using the printer, and laboratory store concerned; and
that said sorting is performed before said totalization is
performed for each sorting process.

Wong discloses that, when the image is reproduced on a
photographic print (column 3, lines 52-57 of Wong), the image is
sorted according to at least one of printing method, type of
printing paper, printer model, individual printer used, operator
using the printer, and laboratory store concerned (column 5,
lines 57-59 of Wong). The image is originally captured on a
photographic print (column 3, line 56 of Wong) and then digitiz-
ed (column 3, lines 52-57 of Wong). The digitization of the
film is part of the sorting process since, when an image is
scanned in (column 4, lines 60-65 of Wong), it is archived
according to various image properties (column 5, lines 57-59 of
Wong).

Michel in view of Bernardi is combinable with Wong because
they are from the same field of endeavor, namely image data
processing. At the time of the invention, it would have been
obvious to a person of ordinary skill in the art to sort the
images, as taught by Wong, and then perform the totalization
taught by Michel on said sorted images for each sorting process.
The motivation for doing so would have been to be able to deter-
mine the authenticity of an image by being able to examine the
data associated with the image (column 2, lines 24-29 of Wong).
Therefore, it would have been obvious to combine Wong with
Michel in view of Bernardi to obtain the invention as specified
in claim 5.

5.   Claim 6 is rejected under 35 U.S.C. 103(a) as being
unpatentable over Michel (US Patent 6,215,562 B1) in view of
Bernardi (US Patent 6,021,278) and Hisatake (US Patent
5,669,040).

Regarding claim 6: Michel discloses previously setting at
least one user input representing a condition of an image
(column 5, lines 44-53 of Michel) or a direction of correction
of the image (column 6, lines 1-8 of Michel), at least one level
indicative input as to a degree of improperness of the image of
a degree of the correction to be executed to the image (column
6, line 62 to column 7, line 3 of Michel) and at least one image
correction condition corresponding to the user input and the
level indicative input (column 7, lines 9-14 of Michel); inputt-
ing the user input and the level indicative input as a correcti-
on instruction according to the image (column 5, lines 44-45 and
lines 50-51; and column 7, lines 1-2 of Michel); and correcting
the image under the corresponding image correction condition
according to the input user input (column 6, lines 1-8 of
Michel) and the level indicative input (column 7, lines 1-8 of
Michel), wherein a plurality of image correction conditions
having different image correcting algorithms are set with
respect to the user input (figure 1; column 5, lines 53-60; and
column 7, lines 1-3 of Michel); image correction is performed by
selecting one of the image correction conditions based on the
level indicative input (column 7, lines 1-3 and lines 9-14 of
Michel).

Michel does not disclose expressly that said user input and
said level indicative input are verbal expressions; that a
number of times each of the image correction conditions is
selected is totalized; and that a priority order of each of the

plurality of image correction conditions is updated according to a result of totalization.

Bernardi discloses inputting a user command as a verbal expression (column 3, lines 21-25 of Bernardi).

Michel is analogous art since Michel is in the same field of endeavor as the present application, namely the calibration and correction of digital image data. Michel and Bernardi are combinable because they are from similar problem solving areas, namely inputting user commands into an image processing system. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to input the user input and level indicative input, taught by Michel, as voice recognized verbal expressions, as taught by Bernardi, and thus previously set, input, and correct according to said commands, as taught by Michel. The motivation for doing so would have been to allow for remote operation of the device (column 1, lines 16-18 of Bernardi). Therefore, it would have been obvious to combine Bernardi with Michel.

Michel in view of Bernardi does not disclose expressly that a number of times each of the image correction conditions is selected is totalized; and that a priority order of each of the plurality of image correction conditions is updated according to a result of totalization.

Hisatake discloses a number of times (figure 4a("job amount") of Hisatake) each of the image output conditions (figure 4a("copy", "fax", "print") of Hisatake) is selected is totalized (figure 4a and column 10, lines 23-30 of Hisatake); and a priority order of each of the plurality of image output conditions is updated according to a result of totalization (figure 4b and column 10, lines 53-58 of Hisatake).

Michel in view of Bernardi is combinable with Hisatake
because they are from similar problem solving areas, namely the
prioritization of computational operations. At the time of the
invention, it would have been obvious to a person of ordinary
skill in the art to perform prioritization as taught by Hisatake
on the image correction conditions taught by Michel. The
motivation for doing so would have been to more efficiently
operate a limited-capacity computational device. Therefore, it
would have been obvious to combine Hisatake with Michel in view
of Bernardi to obtain the invention as specified in claim 6.

6.   **Claims 8 and 13 are rejected under 35 U.S.C. 103(a) as
being unpatentable over Michel (US Patent 6,215,562 B1) in view
of Bernardi (US Patent 6,021,278) and Enomoto (US Patent
6,034,759).**

Regarding claims 8 and 13: Michel in view of Bernardi does
not disclose expressly that density control according to a
result of extraction of an essential portion is included as
image processing, and recomputation of an amount of density
control according to the result of extraction of the essential
portion is included as an image correction according to said
verbal expression.

Enomoto discloses performing density control according to a
result of extraction of an essential portion (column 11, lines
45-49 of Enomoto), and recomputing an amount of density control
according to the result of extraction of the essential portion
(column 11, lines 50-51 and equation 1 of Enomoto). Controlling
the exposure amount (column 11, lines 45-49 of Enomoto) inheren-
tly controls the density since the density is related to the

exposure amount, as shown in detail in column 11, line 50 to column 12, line 20 of Enomoto.

Michel in view of Bernardi is combinable with Enomoto because they are from the same field of endeavor, namely digital image data processing. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to provide density control for the image, as taught by Enomoto. The motivation for doing so would have been provide optimal printing for the principal portion of the image (column 1, lines 46-49 of Enomoto). Therefore, it would have been obvious to combine Enomoto with Michel in view of Bernardi to obtain the invention as specified in claims 8 and 13.

7.   **Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Michel (US Patent 6,215,562 B1) in view of Bernardi (US Patent 6,021,278) and well-know prior art.**

Regarding claim 9: Michel discloses previously setting at least one user input representing a condition of an image (column 5, lines 44-53 of Michel) or a direction of correction of the image (column 6, lines 1-8 of Michel), at least one level indicative input as to a degree of improperness of the image of a degree of the correction to be executed to the image (column 6, line 62 to column 7, line 3 of Michel) and at least one image correction condition corresponding to the user input and the level indicative input (column 7, lines 9-14 of Michel); inputting the user input and the level indicative input as a correction instruction according to the image (column 5, lines 44-45 and lines 50-51; and column 7, lines 1-2 of Michel); and correcting the image under the corresponding image correction condition according to the input user input (column 6, lines 1-8 of

Michel) and the level indicative input (column 7, lines 1-8 of Michel).

Michel further discloses, in correction processing of the image, a numerical input mode to input the correction instructions (column 5, lines 55-57 and column 7, lines 2-3 of Michel).

Michel does not disclose expressly that said user input and said level indicative input are verbal expressions; and that switching is performed between said verbal input mode and said numerical input mode.

Bernardi discloses inputting a user command as a verbal expression (column 3, lines 21-25 of Bernardi).

Michel is analogous art since Michel is in the same field of endeavor as the present application, namely the calibration and correction of digital image data. Michel and Bernardi are combinable because they are from similar problem solving areas, namely inputting user commands into an image processing system. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to input the user input and level indicative input, taught by Michel, as voice recognized verbal expressions, as taught by Bernardi, and thus previously set, input, and correct according to said commands, as taught by Michel. The motivation for doing so would have been to allow for remote operation of the device (column 1, lines 16-18 of Bernardi). Therefore, it would have been obvious to combine Bernardi with Michel.

Michel in view of Bernardi does not disclose expressly that switching is performed between said verbal input mode and said numerical input mode.

Switching between two modes of input has now been accepted by Applicant as being old, well-known and expected in the art.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to switch between said verbal input mode taught by Bernardi and said numerical input mode taught by Michel. The motivation for doing so would have been to have multiple possible ways of entering data, depending upon user preference, in case one form of input does not work well for a particular user or in particular circumstances.

8.   **Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Michel (US Patent 6,215,562 B1) in view of Bernardi (US Patent 6,021,278) and Higurashi (US Patent 6,011,896).**

Regarding claim 10: Michel in view of Bernardi does not disclose expressly that said totalization is performed with respect to a predetermined number of frames.

Higurashi discloses performing error correction for a predetermined number of frames (column 5, lines 5-7 of Higurashi).

Michel in view of Bernardi is combinable with Higurashi because they are from the same field of endeavor, namely digital image data processing and correction. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to perform error correction for a predetermined number of frames, as taught by Higurashi, said error correction being the totalization taught by Michel. The motivation for doing so would have been that a predetermined number of frames should be used due to a limited amount of available memory in a practical system (figure 1 and column 1, line 63 to column 2, line 1 of Higurashi). Therefore, it would have been obvious to

combine Higurashi with Michel in view of Bernardi to obtain the
invention as specified in claim 10.

9.   Claim 11 is rejected under 35 U.S.C. 103(a) as being
unpatentable over Michel (US Patent 6,215,562 B1) in view of
Bernardi (US Patent 6,021,278), Wong (US Patent 6,557,102 B1),
and Kashiyama (US Patent 6,295,415 B1).

Regarding claim 11: Michel in view of Bernardi and Wong
does not disclose expressly that the image scenes are sorted
between ordinary scenes, overexposure scenes, and underexposure
scenes.

Kashiyama discloses sorting image scenes between ordinary
scenes, overexposure scenes, and underexposure scenes (figure 3
and column 6, lines 9-13 of Kashiyama).

Michel in view of Bernardi and Wong is combinable with
Kashiyama because they are from the same field of endeavor,
namely digital image data processing and correction. At the
time of the invention, it would have been obvious to a person of
ordinary skill in the art to sort image scenes according to the
teachings of Kashiyama. The motivation for doing so would have
been to be able to obtain different exposures rates for a
picture as desired by the operator (column 1, lines 33-41 of
Kashiyama). Therefore, it would have been obvious to combine
Kashiyama with Michel in view of Bernardi and Wong to obtain the
invention as specified in claim 11.

10.   Claim 12 is rejected under 35 U.S.C. 103(a) as being
unpatentable over Michel (US Patent 6,215,562 B1) in view of
Bernardi (US Patent 6,021,278), Wong (US Patent 6,557,102 B1),
Kashiyama (US Patent 6,295,415 B1), and obvious engineering
design choice.

   Regarding claim 12: Michel in view of Bernardi and Wong
does not disclose expressly that the image scenes are sorted
between portraits, scenery, night views, underexposure scenes,
and high contrast scenes.

   Kashiyama discloses sorting image scenes based on exposure
data, including underexposure scenes (figure 3 and column 6,
lines 9-13 of Kashiyama).

   Michel in view of Bernardi and Wong is combinable with
Kashiyama because they are from the same field of endeavor,
namely digital image data processing and correction. At the
time of the invention, it would have been obvious to a person of
ordinary skill in the art to sort image scenes according to the
teachings of Kashiyama. The motivation for doing so would have
been to be able to obtain different exposures rates for a
picture as desired by the operator (column 1, lines 33-41 of
Kashiyama). Therefore, it would have been obvious to combine
Kashiyama with Michel in view of Bernardi and Wong.

   It would have been an obvious engineering design choice to
organize the exposure categories taught by Kashiyama specifical-
ly into categories of portraits, scenery, night views, underexp-
osure scenes, and high contrast scenes, each of said categories
requiring different exposure rates in order to obtain a pleasing
resultant picture. The obvious advantage of such a specific
organization is to allow the user to obtain a specifically
desired print for a specifically desired type of picture, each

type requiring a different exposure rate (column 1, lines 33-41
of Kashiyama) due to the lighting conditions, among others.
Thus, it would have been obvious to one of ordinary skill in the
art at the time of the invention to modify the system taught by
Michel in view of Bernardi, Wong and Kashiyama to provide for
the aforementioned specific categories.

11. Claim 14 is rejected under 35 U.S.C. 103(a) as being
unpatentable over Michel (US Patent 6,215,562 B1) in view of
Bernardi (US Patent 6,021,278), Hisatake (US Patent 5,669,040),
and Enomoto (US Patent 6,034,759).

   Regarding claim 14: Michel in view of Bernardi and Hisata-
ke does not disclose expressly that density control according to
a result of extraction of an essential portion is included as
image processing, and recomputation of an amount of density
control according to the result of extraction of the essential
portion is included as an image correction according to said
verbal expression.

   Enomoto discloses performing density control according to a
result of extraction of an essential portion (column 11, lines
45-49 of Enomoto), and recomputing an amount of density control
according to the result of extraction of the essential portion
(column 11, lines 50-51 and equation 1 of Enomoto). Controlling
the exposure amount (column 11, lines 45-49 of Enomoto) inheren-
tly controls the density since the density is related to the
exposure amount, as shown in detail in column 11, line 50 to
column 12, line 20 of Enomoto.

   Michel in view of Bernardi and Hisatake is combinable with
Enomoto because they are from the same field of endeavor, namely
digital image data processing. At the time of the invention, it

would have been obvious to a person of ordinary skill in the art
to provide density control for the image, as taught by Enomoto.
The motivation for doing so would have been provide optimal
printing for the principal portion of the image (column 1, lines
46-49 of Enomoto). Therefore, it would have been obvious to
combine Enomoto with Michel in view of Bernardi and Hisatake to
obtain the invention as specified in claim 14.

12.   **Claim 15 is rejected under 35 U.S.C. 103(a) as being
unpatentable over Michel (US Patent 6,215,562 B1) in view of
Bernardi (US Patent 6,021,278), well-known prior art, and
Enomoto (US Patent 6,034,759).**

Regarding claim 15: Michel in view of Bernardi and well-
known prior art does not disclose expressly that density control
according to a result of extraction of an essential portion is
included as image processing, and recomputation of an amount of
density control according to the result of extraction of the
essential portion is included as an image correction according
to said verbal expression.

Enomoto discloses performing density control according to a
result of extraction of an essential portion (column 11, lines
45-49 of Enomoto), and recomputing an amount of density control
according to the result of extraction of the essential portion
(column 11, lines 50-51 and equation 1 of Enomoto). Controlling
the exposure amount (column 11, lines 45-49 of Enomoto) inheren-
tly controls the density since the density is related to the
exposure amount, as shown in detail in column 11, line 50 to
column 12, line 20 of Enomoto.

Michel in view of Bernardi and well-known prior art is
combinable with Enomoto because they are from the same field of

endeavor, namely digital image data processing. At the time of
the invention, it would have been obvious to a person of ordin-
ary skill in the art to provide density control for the image,
as taught by Enomoto. The motivation for doing so would have
been provide optimal printing for the principal portion of the
image (column 1, lines 46-49 of Enomoto). Therefore, it would
have been obvious to combine Enomoto with Michel in view of
Bernardi and well-known prior art to obtain the invention as
specified in claim 15.

13.   **Claims 18-19 are rejected under 35 U.S.C. 103(a) as being
unpatentable over Michel (US Patent 6,215,562 B1) in view of
Bernardi (US Patent 6,021,278) and Kinoshita (US Patent
5,448,377).**

Regarding claim 18: Michel in view of Bernardi does not
disclose expressly that the correcting the image includes user
input and display of multiple images according to different
intensities based on user input, and the one of the image
corrections is selected from the multiple images.

Kinoshita discloses user input and display of multiple
images according to different intensities based on user input,
and the one of the image corrections is selected from the
multiple images (figures 29a-29c and column 15, lines 15-35 of
Kinoshita).

Michel in view of Bernardi is combinable with Kinoshita
because they are from similar problem solving areas, namely
inputting user commands into an image processing system. At the
time of the invention, it would have been obvious to a person of
ordinary skill in the art to display multiple images from which
one of the image corrections is selected, as taught by Kinoshi-

ta. The motivation for doing so would have been to make image correction more convenient since a direct comparison can be performed by seeing each image at the same time. Therefore, it would have been obvious to combine Kinoshita with Michel in view of Bernardi to obtain the invention as specified in claim 18.

Further regarding claim 19: Kinoshita discloses that the multiple images are displayed simultaneously (figures 29a-29c and column 15, lines 15-35 of Kinoshita).

Conclusion

14. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James A. Thompson whose telephone number is 571-272-7441. The examiner can normally be reached on 8:30AM-5:00PM.
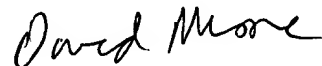
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David K. Moore can be reached on 571-272-7437. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

James A. Thompson
Examiner
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04 October 2006

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